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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/823,574	04/14/2004	Shikio Yoshida	2936-0216PUS1	4815
2292	7590	01/31/2008	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH			LU, ZHIYU	
PO BOX 747			ART UNIT	PAPER NUMBER
FALLS CHURCH, VA 22040-0747			2618	
			NOTIFICATION DATE	DELIVERY MODE
			01/31/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

<b>Office Action Summary</b>	Application No. 10/823,574	Applicant(s) YOSHIDA ET AL.	
	Examiner Zhiyu Lu	Art Unit 2618	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 January 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 2-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Response to Arguments*

1. Applicant's arguments with respect to claims 2-11 have been considered but are moot in view of the new ground(s) of rejection.

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 2-3, 6 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iwata (US Patent#4654883) in view of Zilberbery et al. (US Patent#6505036).

Regarding claim 2, Iwata a wireless transmission and reception card supporting apparatus comprising:

a mount on which a wireless transmission and reception card is mounted (19 of Fig. 1, Fig. 4; column 2 lines 26-58),

said wireless transmission and reception card comprises a pole-shaped antenna having a longitudinal axis along its length (20 of Fig. 1), a main face that is the surface of the card with the largest area, and a transmitter and receiver that is connected to the pole-shaped antenna (Fig. 4), wherein the longitudinal axis of the pole-shaped antenna is substantially parallel to the main face of the wireless transmission and reception card in a normal use state, and wherein, when the

wireless transmission and reception card is mounted on the mount, the pole-shaped antenna of the wireless transmission and reception card is set upright substantially in a vertical direction in the normal use state (Fig. 1).

But, Iwata does not expressly disclose wherein, in the normal use state, the pole-shaped antenna of the wireless transmission and reception card never comes below the level of the user's face. Zilberbery et al. teach putting the pole-shaped antenna of a wireless transmission and reception card above the level of user's face in normal use state (Fig. 3, column 6 lines 33-38).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the wireless transmission and reception card supporting apparatus of Iwata into having the antenna set above the level of user's face taught by Zilberbery et al., in order to reduce radiation at the user's head and improve signal level in the open.

Regarding claim 9, Iwata and Zilberbery et al. teach a wireless network terminal as explained in the response to claim 1 above, where comprising a headset (Fig. 1 of Iwata) and an electric appliance (obviously exists for wireless headset to communicate with).

Regarding claim 3, Iwata and Zilberbery et al. teach the limitation of claim 2.

Iwata teaches wherein the wireless transmission/reception card supporting apparatus is a headset (Fig. 1).

Regarding claim 6, Iwata and Zilberbery et al. teach the limitation of claim 2.

Iwata teaches wherein the wireless transmission/reception card supporting apparatus is an electric appliance (headset, Fig. 1).

3. Claims 4, 7 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iwata (US Patent#4654883) in view of Zilberbery et al. (US Patent#6505036) and Winstead et al. (US Patent#6301489).

Regarding claims 4, 7 and 10, Iwata and Zilberbery et al. teach the limitations of claims 3, 6 and 9.

But, Iwata and Zilberbery et al. do not expressly disclose the mount is rotatable.

Winstead et al. teach a wireless transceiver having a rotatable mount for an antenna (Figs. 7-7B, column 5 line 62 to column 6 line 47).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the mount of the receiver unit of Iwata and Zilberbery et al. into rotatable taught by Winstead et al., in order to provide mechanical adjustment to minimize interferences associated with a user and improve sensitivity of the wireless transceiver.

4. Claims 5, 8 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iwata (US Patent#4654883) in view of Zilberbery et al. (US Patent#6505036) and Usui (JP11-008893).

Regarding claims 5, 8 and 11, Iwata and Zilberbery et al. teach the limitations of claims 3, 6 and 9.

Iwata teaches wherein said headset includes a pair of earpieces, a bridge that couples together the earpieces in such a way as to bridge over a head of a user in the normal use state (Fig. 1).

But, Iwata and Zilberbery et al. do not expressly disclose a patch antenna arranged in the bridge.

Usui teaches having patch antennas arranged in the bridge of a wireless headset for diversity reception method (4 of Fig. 1, Fig. 4, abstract), which obviously can be used with transmitter as well.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate patch antenna on the bridge of wireless headset taught by Usui into the wireless headset of Iwata and Zilberbery et al., in order to achieve diversity method in wireless communication.

### *Conclusion*

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zhiyu Lu whose telephone number is (571) 272-2837. The examiner can normally be reached on Weekdays: 9AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on (571) 272-7882. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Zhiyu Lu  
January 7, 2008

  
**NAY MAUNG**  
**SUPERVISORY PATENT EXAMINER**